

ABSTRACT

A connection system for conduits, fittings or assemblies which are intended for carrying a fluid acted upon by a pressure ( $p_1$ ), in particular for systems carrying carbon dioxide. The connection system comprises a first coupling part such as a housing part, a second coupling part such as a plug part, and is capable of being introduced into the first coupling part along an axis. At least one gas-permeable circumferential seal is arranged in a groove in one of the two coupling parts. One coupling part is capable of being plugged with a shank into a round receiving orifice of the other coupling part. After plugging-in, the circumferential seal seals off a gap between the outer radius of the shank and the inner radius of the